

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1.-29. (cancelled)

30. (currently amended) A hemocompatible surface of an article, device, or material, the hemocompatible surface consisting of:

an artificial compound, a natural organic compound, or an inorganic compound, or a mixture thereof; and,

a constituent of an outer layer of a blood cell, a constituent of an outer layer of a mesothelial cell or a combination thereof, the constituent being firmly attached to the artificial compound, the natural organic compound, or the inorganic compound by at least one of chemical immobilization, photoimmobilization, adhesion, and drying.

the hemocompatible surface does neither activate nor actively suppress a blood coagulation system when having direct contact with blood with the proviso that the hemocompatible surface does not comprise whole, intact cells.

31. (previously presented) The hemocompatible surface of claim 30, wherein the article, device, or material is an animal organ, an animal organ part, a vascular system, or a combination thereof.

32. (previously presented) The hemocompatible surface of claim 30, wherein the constituent consists of:

an oligosaccharide;

a polysaccharide;

lipid portions of a glycoprotein, lipid portions of a glycolipid, or lipid portions of a proteoglycan; or  
combinations thereof;  
wherein the constituent is obtained from outer layers of blood cells, outer layers of mesothelial cells, or combinations thereof.

33. (previously presented) The hemocompatible surface of claim 30, wherein the constituent consists of heparin sulfate obtained from erythrocyte plasma membranes of animals or humans.

34. (currently amended) The hemocompatible surface of claim 30, wherein the constituent consists of an oligosaccharide or a polysaccharide portion of a proteoglycan, wherein the proteoglycan is hyaluronic acid, chondroitin sulfate, dermatan sulfate, ~~heparin~~ heparan sulfate, or keratin sulfate, or a mixture thereof.

35. (previously presented) The hemocompatible surface of claim 30, wherein the constituent consists of glycophorins, glycosphingolipids, or combinations thereof.

36. (previously presented) The hemocompatible surface of claim 30, wherein the hemocompatible surface is non-thrombogenic, non-immunogenic or a combination thereof.

37. (previously presented) The hemocompatible surface of claim 30, wherein the article, device, or material consists of a high-molecular weight organic compound, a metal, a metal oxide, an alloy, a ceramic, a glass, a mineral, or a mixture thereof.

38. (previously presented) The article, device, or material comprising the hemocompatible surface of claim 30.

39. (currently amended) A hemocompatible surface of an article, device, or material, the hemocompatible surface comprising:

an artificial compound, a natural organic compound, or an inorganic compound, or a mixture thereof; and,

a non-thrombogenic constituent of an outer layer of a blood cell, a non-thrombogenic constituent of an outer layer of a mesothelial cell or a combination thereof, the non-thrombogenic constituent separated and isolated from at least one of blood cells and mesothelial cells, the non-thrombogenic constituent consisting of an oligosaccharide; a polysaccharide; lipid portions of a glycoprotein, lipid portions of a glycolipid, or lipid portions of a proteoglycan; or combinations thereof, the non-thrombogenic constituent being firmly attached to the artificial compound, the natural organic compound, or the inorganic compound by at least one of chemical immobilization, photoimmobilization, adhesion, and drying, and

the hemocompatible surface does neither activate nor actively suppress a blood coagulation system when having direct contact with blood with the proviso that the hemocompatible surface does not comprise whole, entire cells.

40. (previously presented) The hemocompatible surface of claim 39, wherein the article, device, or material is an animal organ, an animal organ part, a vascular system, or a combination thereof.

41. (previously presented) The hemocompatible surface of claim 39, wherein the non-thrombogenic constituent consists of heparin sulfate obtained from erythrocyte plasma membranes of animals or humans.

42. (currently amended) The hemocompatible surface of claim 39, wherein the non-thrombogenic constituent consists of an oligosaccharide or a polysaccharide portion of a proteoglycan, wherein the proteoglycan is hyaluronic acid, chondroitin

sulfate, dermatan sulfate, ~~heparin~~ heparan sulfate, or keratin sulfate, or a mixture thereof.

43. (previously presented) The hemocompatible surface of claim 39, wherein the non-thrombogenic constituent consists of glycoproteins, glycosphingolipids, or combinations thereof.

44. (previously presented) The hemocompatible surface of claim 39, wherein the hemocompatible surface is non-immunogenic.

45. (previously presented) The hemocompatible surface of claim 39, wherein the article, device, or material comprises a high-molecular weight organic compound, a metal, a metal oxide, an alloy, a ceramic, a glass, a mineral, or a mixture thereof.

46. (previously presented) The article, device, or material comprising the hemocompatible surface of claim 39.

47. (currently amended) A hemocompatible surface of an article, device, or material, the hemocompatible surface consisting of:

an artificial compound, a natural organic compound, or an inorganic compound, or a mixture thereof; and,

a non-thrombogenic constituent of an outer layer of a blood cell, a non-thrombogenic constituent of an outer layer of a mesothelial cell or a combination thereof, the non-thrombogenic constituent separated and isolated from at least one of blood cells and mesothelial cells, the non-thrombogenic constituent being firmly attached to the artificial compound, the natural organic compound, or the inorganic compound by at least one of chemical immobilization, photoimmobilization, adhesion, and drying, and

the hemocompatible surface does neither activate nor actively suppress a blood coagulation system when having direct contact with blood with the proviso that the hemocompatible surface does not consist of whole, entire cells.

48. (previously presented) The hemocompatible surface of claim 47, wherein the article, device, or material is an animal organ, an animal organ part, a vascular system, or a combination thereof.

49. (previously presented) The hemocompatible surface of claim 47, wherein the non-thrombogenic constituent consists of:

- an oligosaccharide;
  - a polysaccharide;
  - lipid portions of a glycoprotein, lipid portions of a glycolipid, or lipid portions of a proteoglycan; or
  - combinations thereof;
- wherein the non-thrombogenic constituent is obtained from outer layers of blood cells, outer layers of mesothelial cells, or combinations thereof.